RG104 E-1 Box 142 Oct-Nove 1886

Mint of the United States at Philadelphia,
MELTING AND REFINING DEPARTMENT,

Philadelphia, 13th October —, 1886.

Sir,

Since the Anthracite we have been using showed its manifest inferiority to that, which is called for in the Contract, or Agreement to supply the same, — by the greater length of time in melting, — by its inferior heat, except when constantly stirred with a poker, to the positive injury of our fire-men, — and by the large amount of Cinder thrown out after the day's work, I examined it by weight and measure and chemical analysis, with the following results, on a working scale, viz. with two furnaces for a whole day's work.

Total amount of coal consumed in a day (~~carbon~~) 850 lbs
" cinder (ash, slag, & incombustible residue) 200 "
Hence the real coal, or Pure carbon, was 650 "

Allowing the above 850 lbs to be a good coal, we may allow it to have, 6% ash or cinder, = 51 lbs.,
whereas it had (200 − 51 =) 149 lbs more of ash, cinder, &c.

Passing over the small amounts of volatile matter in anthracite, as unimportant we may compare thus a good anthracite, with that of Stockham, in percentages:

	Good Anthracite	Stockham's Anthr.
Carbon	94. pr.ct	76.5 pr.ct
Ashes	6. "	23.5 "

If Stockham's coal were merely good, as above, the 76½% carbon would allow of 4.9% ash with it, making .81 3/8 @ .81½ of Coal.

Since we pay Stockham $4 89/100 per ton, we are paying it for a ton as above, i.e. 81½% of a ton. We are therefore paying him $6.00 for a calculated full ton of Coal.

But this is not all the evil. Seeing our men at work over a furnace will produce a strong conviction of the waste of energy in endeavoring to obtain sufficient heat for melting silver, gold, Copper, &c. with such a shameful substitute for good coal, as we are now using.

Very Respectfully
L & C Booth M & R

Hon. D M. Fox
Superintendent

NARA RG104, Entry 1, Box 142

Mint of the United States at Philadelphia,
Melting and Refining Department,
Philadelphia,
October 13, 1886

Sir,

Since the Anthracite we have been using showed its manifest inferiority to that, which is called for the Contract, or Agreement to supply the same, - by the greater length of time in melting, - by its inferior heat, except when constantly stirred with a poker, to the positive injury of our five-men, - and by the large amount of Cinder thrown out after the day's work, I examined it by weight and measure and chemical analysis, with the following results, on a working scale, viz. with the two furnaces for a whole day's work.

Total amount of coal consumed in a day (~~when~~)	850 lbs.
" cinder (ash, slag, & incombustible residue)	200 "
Hence the real coal, or Pure carbon, was	650 "

Allowing the above 850 lbs. to be a good coal, we may allow it to have, 6% ash or cinder, = 51 lbs., whereas it had (200-51=) 149 lbs. more of ash, cinder, &c.

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	Good Anthracite	Stockham's Anthr.
Carbon	94 pr. ct.	76.5 pr. ct.
Ashes	6 "	23.5 "

If Stockham's Coal were merely good, as above the 76 ½ % carbon would allow of 4.9% ash with it, making .81 3/8 @ .81 ½ of Coal.

Since we pay Stockham $4.89 per ton, we are paying it for a ton as above, i.e. 8 ½ % of a ton. We are therefore paying him $6.00 for a calculated full ton of Coal.

But this is not all the evil. Seeing our men at work over a furnace will produce a strong conviction of the waste of energy in endeavoring to obtain sufficient heat for melting silver, gold, Copper, &c. with such a shameful substitute for good coal, as we are now using.

Very Respectfully,
Jas. C. Booth
M & R

Hon. D.M. Fox
Superintendent